Catalog of the Egan Collection of Silurian Invertebrate Fossils

at

The Chicago Academy of Sciences

BY

JOHN R. BALL

AND

KATHERINE F. GREACEN



Special Publication Number Seven

THE CHICAGO ACADEMY OF SCIENCES
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W. C. Egan, 1841-1930
From a photograph made in 1896.

Catalog of the Egan Collection of Silurian Invertebrate Fossils at The Chicago Academy of Sciences

BY

JOHN R. BALL [1]

AND

KATHERINE F. GREACEN [2]

Research in paleontology involves a comprehensive survey of paleontological and zoölogical literature and the close scrutiny of available material. Available material includes that which has become carefully stored in the many museums of the land. The day is past when a satisfactory description of a fossil organism can rest solely on a single and possibly a fragmental specimen. The available material of the museums may be fully as promising for research as the rare and occasional specimen obtained in the field, fortunate as its discovery may be.

Five or six decades ago, a hobby of fossil-collecting was a favorite pastime with many serious-minded, and, in some instances well-to-do, men. In many cases, what began as an avocation led these men to extensive study and to written accounts and descriptions of their acquisitions. Some self-taught amateur scientists became authorities and passed into the ranks of professionals. By this pathway of experience and original study there entered into chairs of geology in many of the nation's leading universities some of the best-known and most beloved members of the teaching profession. A college degree then was not considered essential for occupancy of the chair.

Others followed their selected vocations through life, but gave such devoted attention to their collections and to study that they became practically indispensable to their professional colleagues. Their private collections were so complete that they became known as the owners of new and interesting fossils. They responded to frequent calls for the loan of their collections which were studied intensively and the new species appearing were described

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[2] Hunt Oil Company, Midland, Texas; formerly Instructor in Geology, Milwaukee-Downer College.

and illustrated by their professional friends. Occasionally they were honored by having a new species named after them.[3]

Their own collections were replenished so carefully and so systematically that the materials increased and seriously taxed home facilities for accommodation. Thomas H. Greene, a druggist of Milwaukee, Wisconsin, solved that problem by building a private museum, which he later presented to Milwaukee-Downer College. W. C. Egan, a business man of Chicago, solved the same problem by establishing the major part of the invertebrate fossil collection of the Chicago Academy of Sciences. This catalog is an index of the fossils of Silurian age in that collection. It is planned that another catalog will be issued by the Academy, listing those fossils of other geologic ages which were included in the Egan bequest.

EGAN'S ACTIVITIES IN THE CHICAGO ACADEMY OF SCIENCES

The name of W. C. Egan appears casually in the minutes of the Chicago Academy of Sciences, January 12, 1875. It was on that date that he was elected to membership. His generous attitude toward the Academy is reflected in an item of the Annual Report for that same year which mentions him as one of the donors of specimens. That Egan exercised the privileges of membership is clear from the consecutive minutes of regular and special meetings which invariably recorded his attendance. In 1882 he was elected a Trustee and remained one until 1897 when he resigned, two years before the expiration of his term of office.

Five years after joining the Academy he was a member of the General Committee. In 1881, a year before his election to the board, he was made a member of a committee to select Trustees. In the year of his election to the board, he was an active member of the Membership Committee. Re-elections to the General Committee and as a Trustee ensued in the decade following 1882.

By 1892 more positive activities in the Academy show forth in the Secretary's minutes. In that year W. C. Egan and Oliver Marcy of Northwestern University were elected to a committee to draft the geological section of the Academy. The collections were continuing to crowd into more space and Egan was appointed on a committee to secure suitable storage facilities until the time arrived for building the Academy home. His nature and in-

[3]Several species of crinoids were named after W. C. Egan. Among them, *Eucalyptocrinites egani* (Miller) and *Periechocrinites egani* (Miller).

terest naturally would motivate his presence at a special meeting in which the Academy's relationships and attitude towards the new University of Chicago were discussed.

Late in 1892, the possibility of a building for the Academy in Lincoln Park developed. Egan was present at the meeting of the Trustees when this prospect was first considered. By July of the following year, architects for the building had been secured, and C. M. Higginson and W. C. Egan of the Trustees were appointed a committee to organize the architect personnel for the proposed building.

At a momentous meeting, August 14, 1893, Egan was made a member of a large committee which was to consider the interests of the Academy in the World's Columbian Exposition. That same fall the cornerstone for the new building was laid. Egan was placed on a committee with J. R. Putnam and C. M. Higginson to consider the proper time to begin work on the collections in the new building.

The echoes, even though triumphal, of plans and progress relative to a new building make the next appointment for Egan very natural and logical. He was made a member of the Finance Committee. The entries in the minutes indicate also that Egan's voice was now being heard in the formulation of plans for the Academy. He was taking active parts in the projects then contemplated. An example of this is his motion of July 26, 1894, that the Judiciary Committee seek competent legal help in establishing relationships of the Academy with the Board of Commissioners of Lincoln Park. Another aggressive and stimulating legislative step is in his motion, January 25, 1895, to change the name, Executive Committee to Museum and Library Committee, the change of name to be inserted in the By-Laws. He was made chairman of this committee.

From the date of his election to membership, 1875, to the date of his major bequest, 1893, Egan repeatedly is mentioned as a donor of museum specimens. In 1877, he gave two large fossil-bearing slabs containing eighty specimens of Chicago region fossils. About the time of his donation of his entire private collection (1893) he evidently was most prolific in his gifts to the Academy. It was then, with F. M. Woodruff, that he gave a collection of winter birds, taken from the vicinity of Lake Michigan and from its waters. In 1895 he tendered thirteen minerals and five corals to the collections. In the following year, he offered twenty minerals and one bird's nest. And in 1897 he gave the skull of a hippopotamus, six fossils and thirty-seven molluscs.

EGAN'S LIFE AND PERSONAL INTERESTS [4]

William Constantine Egan was the son of Dr. William Bradshaw Egan, an Irish physician who had come to Chicago in 1833, and Emeline Mabbatt Egan, New York City, who was of mixed English and Dutch ancestry. He was born in New York City, April 1, 1841, and at the age of six months, with his mother and older sister, he made the journey to Chicago via Erie Canal, stage, and water to join his father.

He was educated in the Chicago Public Schools, developing keen interest in the world surrounding him, and began the collection of curios of various and unusual sorts which later were given to museums. He developed particular interest in geology and paleontology and, with other enthusiasts in that field, explored the virgin collecting fields near Chicago and Joliet, Illinois and Cincinnati, Ohio. [5]

His collection of invertebrate fossils became of great value, including a number new to science which became the types of new species, some named for him in the published descriptions which followed. He presented his collection to the Chicago Academy of Sciences in 1893.

His love for country life, inherited from his father, caused him to purchase in 1887 about four acres of land (including a deep ravine) in Highland Park, Illinois, near Lake Michigan. Later three more acres were added to the property. Here he built a home for summer residence and was deeply interested in the development of his property, removing crippled trees and noxious growths of vegetation, and in applying original landscaping ideas.

He became absorbed in reading and study, corresponded with horticultural authorities, and continued to put his own ideas into experimental practice. He found all of this so engaging that he gradually lengthened his stays at Egandale (named after one of his father's Chicago properties). Deciding to retire from business, he sold his residence at the entrance of Lincoln Park and settled permanently at Egandale. Here he found the greatest satisfaction in the beauty of his natural surroundings and in what he was doing to improve that beauty.

[4] The Chicago Academy of Sciences is deeply appreciative that it may present the following sketch of the life of W. C. Egan, and may tell something of his activities and interests in addition to those in the Academy. This account of his life has been prepared by members of his family who live in and near the locality, Egandale, where he retired after terminating his residence in Chicago. We are especially indebted to Mrs. Sewall Truax, his daughter, Egandale, Highland Park, Illinois.

[5] The "Bridgeport" quarry, Chicago, and Elmhurst, Illinois, possibly were mentioned the most frequently in Egan's correspondence with other collectors.

Finding that writers of horticultural articles and descriptions in catalogs dealt only with specimens indigenous to the eastern states, he began writing articles dealing with the floral growth in western and mid-western climates, mainly for the benefit of beginners and amateurs in horticultural practice. As a result of his vigorous and frequent articles, eastern horticultural firms began to realize that there was a growing market in the hinterlands and began to send to him and to others specimens of floriculture to be tested in this and neighboring regions. Results of some of these experiments were published in horticultural magazines. Many enthusiastic guests came to consult with him and to observe his gardens. He was always eager to explain and advise concerning the garden problems brought to him. At times there were as many as seventy-five callers each week visiting Egandale and its kindly host.

These activities were continued, almost without interruption, until his death on January 12, 1930.

THE EGAN COLLECTION OF FOSSIL INVERTEBRATES

A recent general census of the invertebrate fossils in the Academy's collections indicates a total of more than 10,000 specimens. The names of several other donors appear on the labels and are published in this catalog. Hence, the statement once made that the original Egan collection contains 10,000 specimens implies a slightly larger number than actually was included in his gift.

There are several reasons for restricting this catalog to the fossils of Silurian age. The authors wish to continue the studies inaugurated by the senior author who has been engaged in a study of the Silurian fossils of the lower Mississippi Valley. A necessary enterprise in this study is a survey of the Silurian fossils in the terrain of the upper Mississippi Valley. The authors have attempted to exercise caution in the inevitable tasks of revision and correction and to bring the nomenclature into harmony with present authorized usage. In the arrangement of the list they have tried to respect taxonomic practices as far as possible in order to be of maximum assistance to collectors who may employ the definitions of taxonomic categories in the identification of fossils. They also have attempted to check certainty of identification within reasonable limits. However, they have not assumed as a part of this task the revision or the monographing of any part of the large Silurian fauna. They feel that the listing of available Silurian species in several museums may assure some investigator whether or not he has any need to examine the Silurian fossils which are housed in this museum. New and undescribed species probably lie with those which have been identified by Egan or by some curator

of the museum. It is the hope of the authors that these may be the objects of further study.

It is a part of a general project to present at first only the Silurian fossils at present housed in the museum of the Chicago Academy of Sciences, the museum of geology of Northwestern University, and the Thomas H. Greene Museum of Milwaukee-Downer College. A catalog soon to be issued by the last named institution presents only the Silurian fossils of the Chicago region. That museum has in addition a very large collection of Silurian fossils from Wisconsin.

Several lists from these institutions are contemplated. This one is presented in the hope that specialists in the fossils of the Silurian terrains will find in it helpful information concerning the fossils which are in the Academy collections. The failure of any well-known Silurian fossils to appear in the list will be, also, a pertinent item of information. It is thought that this list will serve in the end to promote exchanges between this and other institutions which will aid, mutually, in supplementing Silurian collections.

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President L. R. Briggs of Milwaukee-Downer College and E. R. Nelson, Jr., Associate Curator of Geology, Milwaukee Public Museum, have repeatedly extended to the authors the courtesies of the Milwaukee-Downer Thomas H. Greene Museum.

Kathryn J. Stephenson, Librarian of the Chicago Academy of Sciences, has secured all pertinent data on W. C. Egan appearing in the minutes of the Academy. She has provided also the Egan correspondence with other collectors. Dr. H. K. Gloyd, Director of the Museum of the Chicago Academy of Sciences, has stimulated the authors with his constant interest in the progress of the compilation. He also has given careful scientific and editorial attention to the presentation of information about the type specimens.

Acknowledgment is made to authors of textbooks, monographs and other studies of Silurian fossils. Their conclusions, especially in matters of taxonomy and revision of scientific names, have been carefully considered. If the pertinent work of any has been overlooked, it is the responsibility of the present writers.

TYPE SPECIMENS

For the convenience of workers especially interested in the taxonomy of Silurian invertebrates, all known type specimens in the collection of the Academy have been segregated and listed in the following section, along with references to the original descriptions. For the Crinoidea, references are also given to Weller's paper on this group (1900) in which much of the Egan material was described, redescribed, or figured. Type specimens are also indicated in the body of the catalog.

PHYLUM ECHINODERMA

Subphylum Pelmatozoa

Class Cystoidea

Order Amphoridea

Genus *Megacystites* Hall 1865

(= *Holocystites* Hall 1864)

***M. jolietensis* (Miller).** Racine (Sil.), Joliet, Illinois.

Holocystites jolietensis MILLER, Journ. Cincinnati Soc. Nat. Hist., vol. 5, 1882, p. 223, pl. 9, fig. 1, 1a. Egan Collection, Chicago Academy of Sciences 2538, cotype. This is the specimen shown in Miller's figure 1. The whereabouts of the other cotype, shown in figure 1a, is unknown to the present authors.

Class Crinoidea

Subclass Inadunata

Order Disparata

Family IOCRINIDAE Moore and Laudon 1943

Genus *Myelodactylus* Hall 1852

***M. bridgeportensis* Miller.**
Racine (Sil.), Bridgeport, Chicago; Hawthorne, Illinois.

M. bridgeportensis MILLER, *loc. cit.,* vol. 3, 1880, p. 141, pl. 4, fig. 2, 2a-c.

M. bridgeportensis WELLER, Chicago Acad. Sci., Bull. Nat. Hist. Surv., no. 4, 1900, pt. 1, p. 69, pl. 15, fig. 1, 2. Egan Col., CAS 2559, plesiotype, Weller's figure 1; CAS 2563 (3), one, a plesiotype, shown in Weller's figure 2.

Order Cladoidea Moore and Laudon 1943

Suborder Cyathocrinoidea

Family CROTALOCRINITIDAE

Genus *Crotalocrinites* T. Austin and T. Austin, Jr. 1842

***C. cora* (Hall).** Racine (Sil.), Bridgeport, Chicago.

Gyathocrinus cora HALL, adv. sheets 18th Rep. New York St. Cab. Nat. Hist., 1865, p. 20, pl. (2), fig. 13, 14.—WELLER, *op. cit.*, p. 62, pl. 14, fig. 6-10. Egan Col., CAS 2508 (2), possibly plesiotypes. One of these specimens compares favorably with Weller's figure 8.

***C. turbinatus* Weller.** Racine (Sil.), Bridgeport, Chicago.

Cyathocrinus turbinatus WELLER, *op. cit.*, p. 65, pl. 14, fig. 13. Egan Col., CAS 10970 (2), topotypes; one may possibly be a cotype.

***C. vanhornei* (Miller).** Racine (Sil.), Bridgeport, Chicago.

Cyathocrinus vanhornei MILLER, *loc. cit.,* vol. 4, 1881, p. 261, p1. 6, fig. 3.—WELLER, *op. cit.* p. 64, pl. 14, fig. 5. Egan Col., CAS 2511 (2), topotypes.

Family AMPHERISTOCRINIDAE

Genus *Ampheristocrinus* Hall 1879

***A. dubius* Weller.** Racine (Sil.), Romeo, Illinois.

A. dubius WELLER, *op. cit.*, p. 67, pl. 14, fig. 11, holotype.

Subclass Flexibilia

Order Taxocrinoidea Springer 1913

Family HOMALOCRINIDAE Angelin 1878

Genus *Pycnosaccus* Angelin 1878

***P. americanus* Weller.** Racine (Sil.), Hawthorne, Illinois.

P. americanus WELLER, *op. cit.*, p. 149, pl. 15, fig. 12. Egan Col., CAS 2460, topotype. The holotype figured by Weller was evidently in the Egan Collection, probably cataloged under the above number, but can not now be found.

Subclass Camerata

Order Diplobathra Moore and Laudon 1943

Family DIMEROCRINITIDAE Bassler 1943

Genus *Dimerocrinites* Phillips 1839

***D. egani* (Miller).** Racine (Sil.), Bridgeport, Chicago.

Glyptaster egani MILLER, *loc. cit.*, vol. 4, 1881, p. 261, pl. 6, fig. 4, 4a, 4b. —WELLER, *op. cit.*, p. 74, pl. 1, fig. 5. Egan Col., CAS 2514 (2), one of which is the holotype figured by Miller and by Weller, and the other a topotype.

***D. occidentalis* (Hall).** Racine (Sil.), Bridgeport, Chicago.

Glyptaster occidentalis HALL, Trans. Albany Inst., vol. 4, 1863, p. 204 (abstract, p. 10).

Thysanocrinus occidentalis WELLER, *op. cit.*, p. 73, pl. 1, fig. 6, 7. Egan Col., CAS 2512 (2), plaster cast, represented in Weller's figure 6. CAS 5303 (2), one of which is a plesiotype, Weller's figure 7.

***D. pentangularis* (Hall).**

Racine (Sil.), Bridgeport, Chicago; Hawthorne, Illinois.

Glyptaster pentangularis HALL, 20th Rep. New York St. Cab. Nat. Hist., 1868, p. 326, pl. 10 (1), fig. 4 (extras, 1865).

Thysanocrinus pentangularis WELLER, *op. cit.*, p. 70, pl. 1, fig. 8-11. Egan Col., CAS 5321 (2), one of which is a plesiotype, represented in Weller's figure 9.

Order Monobathra Moore and Laudon 1943
Family PERIECHOCRINITIDAE Bassler 1938

Genus *Periechocrinites* T . Austin and T. Austin, Jr. 1842

***P. infelix* (Winchell and Marcy).** Racine (Sil.), Bridgeport, Chicago.

Megistocrinus infelix WINCHELL AND MARCY, Mem. Boston Soc. Nat. Hist., vol. 1, 1865, p. 110, pl. 2, fig. *7.*

Periechocrinus infelix WELLER, *op. cit.,* p. 134, pl. 13, fig. 1, 2. Egan Col., CAS 2474, plesiotype, Weller's figure 1.

***P. egani* (Miller).** Racine (Sil.), Cicero, Illinois.

Saccocrinus egani MILLER, *loc. cit.,* vol. 4, 1881, p. 173, pl. 4, fig. 4, 4a. Egan Col., CAS 2470 (2) , cotypes.

Periechocrinus egani WELLER, *op. cit.,* p. 136, pl. 13, fig. 9.

P. urniformis (Miller). Racine (Sil.), Bridgeport, Chicago.

Saccocrinus urniformis MILLER, *loc. cit.,* vol. 4, 1881, p. 170, pl. 4, fig. 2, 2a. Egan Col., CAS 2463 (3), probably cotypes, one represented by Miller's figure 2; CAS 2464, also probably a cotype, Miller's figure 2a.

Periechocrinus urniformis WELLER, *op. cit.,* p. 135, pl. 12, fig. 1, pl. 13, fig. 3, 4. Figure 3 of plate 13 represents one of the three of series 2463.

Family EUCALYPTOCRINITIDAE Bassler 1938

Genus *Eucalyptocrinites* Goldfuss 1826

***E. egani* (Miller).** Racine (Sil.), Bridgeport, Chicago.

Eucalyptocrinus (Hypanthocrinus) egani MILLER, *loc. cit.,* vol. 3, 1880, p. 140, pl. 4, fig. 1-1c.

E. egani WELLER, *op. cit.,* p. 108, pl. 7, fig. 4. Egan Col., CAS 2423 (2), one a plesiotype, figured by Weller; CAS 2435, topotype.

***E. turbinatus* (Miller).** Racine (Sil.), Bridgeport, Chicago.

Eucalyptocrinus turbinatus MILLER, *loc. cit.,* vol. 5, 1882, p. 82, pl. 3, fig. 5, 5a. Egan Col., CAS 2459, cotype, figure 5; CAS 2437, cotype, figure 5a. —WELLER, *op. cit.,* p. 107, pl. 6, fig. 1, 2. CAS 2459, figure 1; 2437, figure 2.

PHYLUM MOLLUSCA

Class Pelecypoda

Order Prionodesmacea

Section B Taxodonta Neumayr (emend.)

Superfamily Nuculacea

Family LEDIDAE Adams

Genus *Cleidophorus* Hall 1847

***C. chicagoensis* Miller.** Racine (Sil.), Bridgeport, Chicago.

Clidophorus chicagoensis MILLER, *loc. cit.*, vol. 3, 1881, p. 314, pl. 8, fig. 2, 2a. Egan Col., CAS 2697 (2), correspond fairly well to Miller's figures, probably cotypes; CAS 2693 (2), topotypes.

CATALOG OF MUSEUM SPECIMENS

In this catalog the species are arranged according to the most effective and recent classification which the authors have been able to follow. Under the phylum, class, order, and family, the generic name is printed in bold-face type, followed by the name of the author of the genus and the year of publication. The species selected as typical of the genus (genotype) is also given. In the list of species under each genus, the generic name is abbreviated. For further taxonomic and bibliographical references, the user of the catalog is expected to consult Bassler's *Bibliographic Index of American Ordovician and Silurian Fossils* (1915) and Shimer and Shock's *Index Fossils of North America* (1944).

Under the name of each species, the specimens in the Academy's collection are listed by localities and museum numbers. Where more than one specimen is included under a single catalog number, the number of individuals in the series is indicated in parentheses. Where the name of the donor is not stated, it is to be understood that the specimen is a gift of W. C. Egan.

PHYLUM PORIFERA
Class Demospongia
Order Lithistida
Suborder Eutaxiclidina
Family ASTYLOSPONGIDAE Rauff

Genus *Astylospongia* Roemer 1860
Genotype *Siphonia praemorsa* Goldfuss

***A. praemorsa* (Goldfuss).**

Illinois: Kendall Co., drift boulder, 2999 (3), 3002. *Indiana:* Waldron, 2993 (3). *Tennessee:* Perryville, 5611 (6), 5616, 5621 (2), Mr. Barton.

Genus *Caryospongia* Rauff 1894
Genotype *Siphonia juglans* Quensted

***C. juglans nuxmoschata* (Hall).**

Illinois: Kendall Co., 17305 (3). *Indiana:* Waldron, 2994 (3). *Tennessee:* Perryville, 2996, 5617, 5612-6 (6, 4, 2, 6, 1); 5620 (2), Mr. Barton. *Ontario:* Hamilton, 5618-9 (4, 2), 3050.

Genus *Palaeomanon* Roemer 1860
Genotype *Siphonia cratera* Roemer

***P. cratera* (Roemer).**

Tennessee: West Tennessee, 2995.

SYSTEMATIC POSITION UNCERTAIN

Family RECEPTACULITIDAE Roemer

Genus *Receptaculites* Defrance 1827
Genotype *R. neptuni* Defrance

***R. hemisphericus* (Hall).**

Wisconsin: Waukesha, 2991.

***R. tessellatus* (Winchell and Marcy).**

Illinois: Bridgeport, 5338-41 (3, 1, 1, 1); 11 not catalogued.

Genus *Ischadites* Lonsdale 1839

Genotype *Tetragonis murchisoni* Eichwald

***I. iowensis* (Owen).**

Illinois: Brideport, (3) not cataloged.

Genus *Cerionites* Meek and Worthen 1868

Genotype *Lunulites dactyloides* Owen 1884

***C. dactyloides* (Owen).**

Iowa: Jones County, 7928 (2), Mrs. A. H. Davidson.

Genus *Astraeospongia* Roemer 1860

Genotype *Blumenbachium meniscus* Roemer 1848

***A. meniscus* (Roemer).**

Tennessee: West Tennessee, 2995.

PHYLUM COELENTERATA

Class Anthozoa

Subclass Tetracoralla Haeckel

Family CYATHAXONIDAE Edwards and Haime

Genus *Lindstromia* Nicholson and Thomson 1876

Genotype *L. columnaris* Nicholson and Thomson

***L. wisconsinensis* (Whitfield).**

Wisconsin: Racine, 3048, 15327.

Genus *Duncanella* Nicholson 1874

Genotype *D. borealis* Nicholson 1874

***D. borealis* Nicholson.**

Indiana: Waldron, 3077 (7).

Family *Zaphrentidae* Edwards and Haime

Genus *Streptelasma* Hall 1847

Genotype *S. corniculum* Hall

***S. corniculum* Hall.**

Illinois: Bridgeport, 2386 (4). *Indiana:* Deputy, 3346; Osgood, 3067 (3).

Streptelasma sp.

Indiana: Waldron, 3041 (2).

Genus *Ditoecholasma* Simpson 1900.

Genotype *Petraia fanningana* Safford 1869

***D. fanninganum* (Safford).**

Tennessee: West Tennessee, 3047 (3).

Genus *Enterolasma* Simpson 1900

Genotype *Streptelasma (Petraia) stricta* Hall

***E. caliculum* (Hall).**

Illinois: Bridgeport, 2387 (5). *New York:* Litchfield, 3412.

Genus *Zaphrentis* Rafinesque and Clifford 1820

Genotype *Z. phrygia* Rafinesque and Clifford

(=*Caryophillia cornicula* Leseur—in part)

***Z. bilateralis* (Hall).**

New York: Genessee Gorge, 17212, F. C. Baker.

***Z. roemeri* Edwards and Haime.**

Illinois: Channahon, 3415 (8), 3417 (2).

***Z. subregularis* Savage ?**

Illinois: Oswego, 2 not cataloged.

***Z. turbinata* (Hall).**

Illinois: Bridgeport, 2390-2, 2977 (many).

***Zaphrentis* sp.** (also, Stromatoporoid)

Illinois: Oswego, 403 (2).

Genus *Neozaphrentis* Grove 1935

Genotype *Zaphrentis tenella* Miller

***N. racinensis* (Whitfield).**
Illinois: Bridgeport, 5337 (3).

Genus *Amplexus* Sowerby 1814

Genotype *A. coralloides* Sowerby

***A. shumardi* (Edwards and Haime) ?**
Tennessee: West Tennessee, 3043.

***Amplexus* sp.**
Illinois: Bridgeport, 5345. *Michigan:* Drummond's Island, 2 not cataloged, Brayson Saltonstall.

Family CYATHOPHYLLIDAE Edwards and Haime

Genus *Cyathophyllum* Goldfuss 1826

Genotype *C. dianthus* Goldfuss

***C. radicula* Rominger.**
Kentucky: Louisville, 3064 (10), James Knapp.

Genus *Diphyphyllum* Lonsdale 1845

Genotype *D. concinnum* Lonsdale

***D. caespitosum* (Hall).**
Illinois: Bridgeport, 2375 (2), 2385, 5627 (many), W. C. Egan and Graham Davis.

***D. huronicum* Rominger.**
Illinois: Joliet, 3031.

Genus *Eridophyllum* Edwards and Haime 1850

Genotype *E. verneuilanum* Edwards and Haime

***E. rugosum* Edwards and Haime.**
Kentucky: 3033, James Knapp.

Genus *Ptychophyllum* Edwards and Haime 1850

Genotype *P. stokesi* Edwards and Haime

***P. stokesi* Edwards and Haime.**
Kentucky: Louisville, 3040 (2), James Knapp.

Genus *Arachnophyllum* Dana 1846

Genotype *Strombodes murchisoni* Edwards and Haime

***A. pentagonum* (Goldfuss).**

Illinois: Brideport, 2393.

***A. striatum* (d'Orbigny).**

Kentucky: Louisville, 3512, James Knapp. *Wisconsin:* Door County, 18433-4, A. O. Stecher.

Family CYSTIPHYLLIDAE Edwards and Haime

Genus *Calceola* Lamarck 1799

Genotype *Anomia sandalinum* Linnaeus

***C. (Rhizophyllum) tennesseensis* Rominger.**

Tennessee: Wayne County, 3049.

Genus *Cystiphyllum* Lonsdale 1839

Genotype *C. siluriense* Lonsdale

***C. niagarense* (Hall).**

Illinois: Brideport, 2410, 2413, 5424 (3).

Genus *Cystostylus* Whitfield 1880

Genotype *C. typicus* Whitfield 1880

C *infundibulus* (Whitfield).

Wisconsin: Milwaukee, 3027.

Genus *Goniophyllum* Edwards and Haime

Genotype *Turbiniola pyramidalis* Hisinger 1829

***G. pyramidale* (Hisinger).**

Iowa: Jones County, 7987 (3), Mrs. A. D. Davidson.

Subclass Tabulata Edwards and Haime

Family FAVOSITIDAE Edwards and Haime

Genus *Coenites* Eichwald 1829

(= *Cladopora* Hall 1851)

Genotype *C. juniperinus* Eichwald

C. ***crassus*** **(Rominger).**

Illinois: Bridgeport, 2386 (2).

C. fibrosa **(Hall).**

Illinois: Bridgeport, 2381 (2).

C. reticulata **(Hall).**

Illinois: Bridgeport, 2376 (2), 2379 (2), 2380, 2384, 2978, 5335 (5). Riverside, 5336, J. F. Porter. *Kentucky:* Louisville, 3055, James Knapp.

C. seriata **(Hall).**

Illinois: Bridgeport, 2378 (3).

C. verticillatus **(Winchell and Marcy).**

Illinois: Bridgeport, 2382, 4309.

Genus *Favosites* Lamarck 1816

Genotype *F. gothlandicus* Lamarck

F. discoideus **(Roemer).**

Tennessee: West Tennessee, 3021 (2).

F. favosus **(Goldfuss).**

Illinois: Riverside, 5343, T. F. Porter. *Iowa:* Manchester, 3006-7; 15323, F. T. Cockerton; Masonville, 3009 (2). *Michigan:* Point de Tour, 3011 (2). *Kentucky:* Louisville, 16326, F. T. Cockerton. *Wisconsin:* Door County, 18532-5 (8); 3014-5, A. D. Stecher; Milwaukee, 3010 (2), 3012, 3023 (2); 15326, Mrs. Nicholas Senn.

F. forbesi occidentalis **Hall.**

Indiana: Waldron, 3005.

F. niagarensis **Hall.**

Illinois: Bridgeport, 2373 (2), 2733, 5344 (9); 5628, Graham Davis. *Michigan:* Drummond's Island, 17309, Brayton Saltonstall.

Favosites **sp.**

Tennessee: West Tennessee, 3057 (2).

Genus *Pleurodictyum* Goldfuss 1829

Genotype *P. problematicum* Goldfuss

Pleurodictyum sp.
Illinois: Joliet, 3045 (2).

Genus *Striatopora* Hall 1851

Genotype *S. flexuosa* Hall

***Striatopora ?* sp.**
Illinois: Bridgeport, 5347.

PHYLUM ANNELIDA (ANNULATA)

Class Chaetopoda

Subclass Polychaeta

Order Cryptocephala

Genus *Cornulites* Schlotheim 1820

Genotype *C. serpularius* Schlotheim

***C. proprius* Hall.**
Indiana: Waldron, 3249.

Order Miskoa (?)

Genus *Lecthaylus* Weller 1925

Genotype *L. gregarius* Weller 1925

***L. gregarius* Weller.**
Illinois: Blue Island, many not cataloged, J. R. Ball.

PHYLUM ECHINODERMA

Subphylum Pelmatozoa Leuckart

Class Cystoidea Leopold von Buch

Order Amphoridea Haeckel

Family ARISTOCYSTIDAE Neumayr

Genus *Megacystites* Hall 1865

(= *Holocystites* Hall 1864)

Genotype *Caryocystites cylindricus* Hall 1861

***M. cylindricus* (Hall).**
Wisconsin: Racine, 3074 (2), 3076 (2), 3082 (2).

***M. globosus* (Miller).**
Illinois: Jefferson Co., 15333, F. T. Cockerton.

***M. jolietensis* (Miller).**
Illinois: Joliet, 2538 (cotype), 2539.

***M. scutellatus* (Hall).**
Wisconsin: Waukesha, 3075, 15335 (2), 3076 (?).

***Megacystites* sp.**
Illinois: Bridgeport, 2556 (4), 2561; Joliet, 3071, 3084 (2 ?). *Indiana:* Osgood, 3069 (2), 3077 (11). *Wisconsin:* Racine, 3074 (2).

Order Rhombifera Zittel (emend. Bather)

Family CARYOCRINIDAE Bernard

Genus *Caryocrinites* Say 1825

(*Caryocrinus* of authors)

Genotype *C. ornatus* Say

***C. ornatus* Say.**
Illinois: Bridgeport, 2536-7 (1, 7), 2544, 5806 (4 ?); Joliet, 3155. *New York:* Buffalo, Erie Canal, 3130 (12). *Wisconsin:* Racine, 7 not cataloged, Arthur Peabody.

***Caryocrinites* sp.**
Illinois: Joliet, 3119 (3).

Family CALLOCYSTIDAE Bernard

Genus *Coelocystis* Schuchert 1903

Genotype *Hemicosmites subglobosus* Hall 1868

***C. subglobosus* (Hall).**
Wisconsin: Racine, 3171 (5).

Order Diplorita Zittel

Family SPHAERONITIDAE Neumayr

Genus *Trematocystis* Jaekel 1899

Genotype *Holocystites subglobosus* Miller 1889

***T. subglobosus* (Miller).**
Wisconsin: Racine, 3 not cataloged.

Family GOMPHOCYSTIDAE Bather

Genus *Gomphocystites* Hall 1868

Genotype *G. glans* Hall

***G. glans* Hall.**
Wisconsin: Racine, 3103 (2).

Order Aporita Zittel

Family CRYPTOCRINIDAE Zittel

Genus *Lysocystites* Miller 1889

Genotype *Echinocystites nodosus* Hall 1868

***L. nodosus* (Hall).**
Illinois: Joliet, 3080.

Class Blastoidea Say

Order Eublastoidea Bather

Family TROOSTOBLASTIDAE Etheridge and Carpenter

Genus *Troosticrinus* Schumard 1865

Genotype *Pentremites reinwardti* Troost 1835

***T. reinwardti* (Troost).**
Tennessee: West Tennessee, 3106.

Class Crinoidea Miller 1821

Subclass Inadunata Wachsmuth and Springer

Order Disparata Moore and Laudon 1943

Family IOCRINIDAE Moore and Laudon 1943

Genus *Myelodactylus* Hall 1852

Genotype *M. convolutus* Hall 1852

***M. bridgeportensis* Miller.**

Illinois: Bridgeport, 2559 (plesiotype), 2560 (2), 2563 (3) (one a plesiotype, see p. 10), 2564 (5), 5366, 17326.

Order Cladoidea Moore and Laudon 1943

Suborder Cyathocrinoidea Bather 1899

Family CROTALOCRINITIDAE Bassler 1938

Genus *Crotalocrinus* T. Austin and T. Austin, Jr. 1842

Genotype *Cyathocrinites rugosus* Miller

***C. cora* (Hall).**

Illinois: Bridgeport, 2507 (5), 2508 (2, possibly plesiotypes), 2515, 5296 (5); Joliet, 3160. *Wisconsin:* Racine, 3086 (4), 3090 (3), 3117 (4), 3128.

***C. turbinatus* Weller.**

Illinois: Bridgeport, 10970 (2), topotypes (one may be cotype).

***C. vanhornei* (Miller).**

Illinois: Bridgeport, 2511 (2), topotypes.

Subclass Flexibilia Zittel 1879

Order Sagenocrinoidea Springer 1913

Family Lecanocrinidae Springer 1913

Genus *Lecanocrinus* Hall 1852

Genotype *L. macropetalus* Hall 1852

***L. pusillus* (Hall).**

Illinois: Bridgeport, 2448 (10). *Indiana:* Waldron, 3114 (2).

***L. waukoma* (Hall).**

Illinois: Bridgeport, 2553 (13). *Wisconsin:* Waukesha, 2509 (6); locality ? (11).

Family ICHTHYOCRINIDAE Angelin 1878

Genus *Ichthyocrinus* Conrad 1842

Genotype *I. laevis* Conrad 1842

***I. corbis* Winchell and Marcy.**

Illinois: Bridgeport, 5309 (3), J. F. Porter.

***I. subangularis* Hall.**

Illinois: Bridgeport, 2525-7 (3, 3, 5), 5308 (3), 5310; Drainage Canal, 2540 (3), E. W. Nelson; 17482, C. F. Gunther.

Subclass Camerata Wachsmuth and Springer 1885

Order Diplobathra Moore and Laudon 1943

Family ARCHAEOCRINIDAE Moore and Laudon 1943

Genus *Archaeocrinus* Wachsmuth and Springer 1881

Genotype *Glyptocrinus lacunosus* Billings 1857

***A. depressus* Weller.**

Illinois: Bridgeport, 2518 (3); Cicero, 2543 (2).

Family RHODOCRINITIDAE Bassler 1938

Genus *Lyriocrinus* Hall 1852

Genotype *Marsupiocrinites? dactylus* Hall 1843

***L. melissa* Hall.**

Illinois: Bridgeport, 2418 (3), 2543, 2554 (4), 3149; *Joliet*, 3149. *Indiana:* Waldron, 3116 (4).

Family DIMEROCRINITIDAE Bassler 1938

Genus *Dimerocrinites* Phillips 1839

Genotype *D. decadactylus* Phillips

***D. inornatus* (Hall).**

Wisconsin : Racine, 3121.

***D. occidentalis* (Hall).**

Illinois: Bridgeport, 2504-6 (4, 7, 5), 2512 (see p. 11), 5 303 (2, one a plesiotype), 5305 (12).

Genus *Cyphocrinus* S. A. Miller 1892

Genotype *C. gorbyi* S. A. Miller 1892

C. *chicagoensis* Weller.

Illinois: Bridgeport, 2573.

Family LAMPTEROCRINIDAE Bather 1899

Genus *Lampterocrinus* Roemer 1860

Genotype *L. tennesseensis* Roemer 1860

***L. ? dubius* Weller.**

Illinois: Joliet, 5312 (6).

***L. inflatus* (Hall).**

Illinois: Joliet, 3134 (6). *Wisconsin:* Racine, 3142 (8).

Genus *Siphonocrinus* S. A. Miller 1888

Genotype *Glyptocrinus nobilis* Hall 1861

***S. armosus* (McChesney).**

Wisconsin: Racine, 17319 (3).

***S. nobilis* (Hall).**

Illinois: Bridgeport, 2557-8 (5, 4), 5314, 5353-4 (2, 2). *Wisconsin:* Racine, 3115 (2), Arthur Peabody; 3123 (2), 3150-1 (2, 2), 3154 (3).

***S. pentagonus* Wachsmuth and Springer.**

Wisconsin: Racine, 3152.

Family GAZACRINIDAE S. A. Miller

Genus *Gazacrinus* S. A. Miller 1892

Genotype *G. inornatus* S. A. Miller 1894

***G. minor* Weller.**

Illinois: Bridgeport, 2555 (3).

Order Monobathra Moore and Lauden 1943

Family PERIECHOCRINITIDAE Bassler 1938

Genus *Periechocrinites* T. Austin and T. Austin, Jr., 1842

Genotype *P. costatus* T. Austin and T. Austin, Jr.

***P. egani* (Miller).**

Illinois: Bridgeport, 2470 (2, Cotypes), 2471-3 (1, 3, 4), 2479-80 (4, 4), 2482 (6), 2487 (2), 2489 (2), 2493 (2), 5328-30 (4, 4, 3).

***P. infelix* (Winchell and Marcy).**

Illinois: Bridgeport, 2474 (plesiotype), 2485 (7), 17324.

***P. marcouanus* (Winchell and Marcy).**

Illinois: Bridgeport, 2454-7 (1, 1, 1, 3), 2458 (2), 2462 (4), 2468, 2475, 2484, 5351-2 (5, 4), 17325; Cicero, 2497 (3), 5333 (2).

***P. necis* (Winchell and Marcy).**

Illinois: Bridgeport, 2481 (2), 2486, 2490 (3), 2491 (8), 2492 (11), 4311 (2), 5297 (2), 5304 (3), 5318 (4), 17322; Drainage Canal, 17481, C. F. Gunther.

***P. urniformis* (Miller).**

Illinois: Bridgeport, 2463 (3, probably cotypes), 2464 (cotype ? see p. 12), 2467 (2), 2475, 2477 (2), 5316, 5348-50 (3, 6, 6), 17323; Cicero, 2479 (2) .

***P. whitfieldi* (Hall).**

Indiana: Waldron, 3095 (4), 15331.

Family DESMIDOCRINIDAE Angelin 1878

Genus *Saccocrinus* Hall 1852

Genotype *S. speciosus* Hall 1852

***S. benedicti* S. A. Miller.**

Illinois: Bridgeport, 2453, W. C. Calkins; 2551 (4), 5356-7 (10, 8); Drainage Canal, 17480, C. F. Gunther.

Family MELOCRINITIDAE Bassler 1938

Genus *Melocrinites* Goldfuss 1826

Genotype *M. hieroglyphicus* Goldfuss

***M. obpyramidalis* (Winchell and Marcy).**

Illinois : Bridgeport, 2517-20 (2, 3, 10, 4), 2523-4 (4, 12), 5311 (6), 17320. *Wisconsin:* Racine, 3118 (3), 3156 (2).

Family **EUCALYPTOCRINITIDAE** Bassler 1938

Genus *Calliocrinus* d'Orbigny 1849

Genotype *Eugeniacrinites costatus* Hisinger

***C. cornutus* (Hall).**
Illinois: Bridgeport, 2537 (3). *Wisconsin:* Racine, 3090 (3), 3128.

***C. corrugatus* (Weller).**
Illinois: Joliet, 3174, 3381, 5431.

Genus *Chicagocrinus* Weller 1900

Genotype *C. ornatus* Weller 1900

***Chicagocrinus* sp.**
Illinois: Romeo (one, not cataloged).

Genus *Eucalyptocrinites* Goldfuss 1826

Genotype *E. rosaceus* Goldfuss

***E. asper* (Weller).**
Illinois: Bridgeport, 2445 (3), 2450 (3), 2550.

***E. crassus* (Hall).**
Illinois: Bridgeport, 2420 (9), 2422 (14), 2438-41 (1, 4, 1, 2), 2443 (3), 2446, 2449 (6), 2451-2 (3, 1), 2516, 2522, 2542, 5295 (2), 5326-7 (4, 3), 5825 (15); Chicago, 5323-4 (2, 8), T. F. Porter; Drainage Canal, 17478, C. F. Gunther. *Indiana:* Waldron, 3099 (6), 3129 (4). *Wisconsin:* Racine, 3094 (4), 3153, 15334 (4).

***E. depressus* (S. A. Miller).**
Illinois: Bridgeport, 2429, 2545-6 (2), 5301 (2), 5322, J. F. Porter; 5623, Graham Davis; Cicero, 2430 (5); Drainage Canal, 17479, C. F. Gunther.

***E. egani* (S. A. Miller).**
Illinois: Bridgeport, 2423 (2, one a plesiotype), 2426-7 (2, 2), 2431-5 (2, 1, 1, 1), 2436, 5294 (7), 5390.

***E. nodulosus* (Weller).**
Illinois: Bridgeport, 2471.

***E. ornatus* (Hall).**
Wisconsin: Racine, 3102 (2).

***E. ovalis* (Hall).**
Indiana: Waldron, 3127 (2), 15330.

***E. rotundus (S.* A. Miller).**
Illinois: Bridgeport, 2419 (2).

***E. tuberculatus* (Miller and Dyer).**
Wisconsin: Greenfield, 3088 (2).

***E. turbinatus* (S. A. Miller).**
Illinois: Bridgeport, 2437, 2459 (cotypes), 5299, 5428 (4), 17321.

***Eucalyptocrinites* sp.**
Illinois: Bridgeport, 2542; Joliet, 3138. *Indiana:* Waldron, 3096.

Family PLATYCRINITIDAE Bassler 1938

Genus *Platycrinites* Miller 1821

Genotype *P. laevis* Miller 1821

***Platycrinites* sp.**
Illinois: Bridgeport, 3256. *Wisconsin:* Racine, 3152.

PHYLUM BRACHIOPODA

Class Inarticulata

Order Atremata Beecher

Superfamily Obolacea Schuchert

Family LINGULIDAE Gray

Genus *Lingula* Bruguiere 1792

Genotype *Patella unguis* Linnaeus

***L. cuneata* Conrad.**
New York: Medina, 15010 (many), F. T. Cucker.

Superfamily Trimerellacea G. A. Cooper

Family TRIMERELLIDAE Davidson and King

Genus *Monomorella* Billings 1871

Genotype *M. prisca* Billings 1871

***M. kingi* Hall and Clarke.**
Illinois: Cicero, 2630.

***M. ovata lata* Whiteaves.**
Ontario: Durham, 4058 (2), Miss Davidson.

***M. prisca* Billings.**

Illinois: Bridgeport, 2628 (2), 5375; Cicero, 2627 (3), 2639 (4?), 17312 (2).

Order Neotremata Beecher

Superfamily Discinacea Waagen

Family DISCINIDAE Gray

Genus *Orbiculoidea* d'Orbigny 1847

Genotype *O. forbesi* Davidson

***O. discus* Hall ?**

Illinois: Bridgeport, 2609 (4).

Class Articulata

Order Palaeotremata

Impunctate Articulata

Superfamily Orthacea Walcott and Schuchert 1908

Family ORTHIDAE Woodward 1852

Subfamily Orthinae Schuchert and Cooper 1931

Genus *Dolerorthis* Schuchert and Cooper 1931

Genotype *Orthis interplicata* Foerste 1909

***O. flabellites* (Foerste).**

Illinois: Cicero, 2357, 2957. *Indiana:* Osgood, 1374.

Family PLECTORTHIDAE Schuchert and Cooper 1930

Subfamily Platystrophinae Schuchert 1929

Genus *Platystrophia* King 1850

Genoholotype *Terebratulites biforatus* Schlotheim 1820

***Platystrophia* sp.**

Illinois: Rock Run, 2338.

Punctate Articulata
Superfamily Dalmanellacea Schuchert and Cooper 1931

Family DALMANELLIDAE Schuchert 1929 (emended)

Genus *Dalmanella* Hall and Clarke 1892

Genolectotype *Orthis testudinaria* Hall and Clarke (non Dalman) 1892

***D. elegantulata* (Dalman).**

Illinois: Bridgeport, 2616. *Indiana:* Waldron, 3180, 3181 (6).

***D. lunata* (Sowerby) ?**

Wisconsin: Wauwatosa, 551 (2), 553.

***Dalmanella* sp.**

Illinois: Bridgeport, 2611; Joliet, 3245, Rock Run, 2330, 2335.

Family BILOBITIDAE Schuchert and Cooper 1931

Genus *Bilobites* Linnaeus 1775

Genoholotype *Anomia biloba* Linnaeus 1767

***B. bilobus* (Linnaeus).**

England: Dudley, 3399. *New York:* Albany, 16221 (5), exchange Cockerton.

Pseudopunctate Articulata

Superfamily Strophomenacea Schuchert

Family STROPHOMENIDAE King

Subfamily Rafinesquininae Schuchert

Genus *Leptaena* Dalman 1828

Genotype *Conchita rhomboidalis* Wilckens 1769

***L. rhomboidalis* (Wilckens).**

Illinois: Bridgeport, 2640 (5), 2646-9 (1, 2, 2, 7); 5365 (4), J. F. Porter; Joliet, 3179. *Indiana:* Waldron, 3186 (2). *New York:* Genesee Gorge, 17221, F. C. Baker; Niagara Falls, 8204.

Genus *Stropheodonta* Hall 1852

Genotype *Strophomena demissa* Conrad 1842

***S. corrugata* (Conrad).**

New York: Genesee Gorge, 17223+4 (3, 4), F. C. Baker.

***S. profunda* (Hall).**

Illinois: Bridgeport, 2652 ?, 2653 ?, 2654, 2656 (3), 2666. *New York:* Genesee Gorge, 17219 (3), F. C. Baker. *Wisconsin:* Racine, 3182-3 (3, 4).

***Stropheodonta* sp.**

Illinois: Joliet, 3244.

Genus *Strophonella* Hall 1879

Genotype *Strophomena semifasciata* Hall 1863

***S. semifasciata* (Hall).**

Illinois: Bridgeport, 2657-9 (2, 2, 2); 5622, Graham Davis.

***S. striata* (Hall).**

Illinois: Bridgeport, 2650 (3), 2651 (3), 5364 (4).

Subfamily Orthotetinae Waagen

Genus *Schuchertella* Girty 1904

Genotype *Streptorhynchus lens* White

***S. missouriensis* (Shumard).**

Illinois: Channehon, 3416 (2), 3433 (2), 16214, 17352 (2).

***S. subplana* (Conrad).**

Illinois: Bridgeport, 2655 (2), 2660-2 (1, 10, 6), 2667 (2), 5380 (4); Cicero, 2663 (2); Joliet, 3185 (2). *New York:* Genesee Gorge, 17228-9 (3, 4), F. C. Baker.

Superfamily Triplesiacea G. A. Cooper

Genus *Dictyonella* Hall 1867

Genotype *Rhynchonella ? reticulata* Hall 1863

***D. reticulata* (Hall).**

Illinois: Bridgeport, 2644. *Indiana:* Waldron, 3222 (6).

Suborder Pentameroidea Schuchert and Cooper 1931

Superfamily Pentameracea Schuchert 1896

Family CAMERELLIDAE Hall and Clarke 1894

Genus *Anastrophia* Hall 1867

Genotype *Pentamerus verneuili* Hall 1857

***A. internascens* (Hall).**

Illinois: Bridgeport, 2579 (19), 5372 (3), *Indiana:* Waldron, 3236 (4). Unknown locality, 2594 (2), donor unknown.

Family PENTAMERIDAE McCoy 1844

Subfamily Gypidilinae Schuchert 1929

Genus *Clorinda* Barrande 1879

Genoholotype *C. armata* Barrande 1879

***C. ventricosa* (Hall).**

Illinois: Bridgeport, 2626 (13), 2629 (2). *Wisconsin:* Milwaukee, 3226.

Genus *Gypidula* Hall 1867

Genotype *Pentamerus occidentalis* Hall 1852

***G. roemeri* (Hall and Clarke).**

Illinois: Bridgeport, 2621 (2). *Tennessee:* West Tennessee, 3224 (2).

Superfamily Pentameracea Schuchert

Family PENTAMERIDAE McCoy

Genus *Pentamerus* Sowerby 1813

Genotype *P. laevis* Sowerby 1813

***P. oblongus* Sowerby.**

Illinois: Bridgeport, 1615. *Iowa:* Jones Co., 3230 (2). *Michigan:* St. Marys River, 3233 (2), J. W. Foster. *New York:* Genesee Gorge, 17232-4 (8, 5, 4), F. C. Baker. *Ohio:* Hillsboro, 3207 (2). *Wisconsin:* Cedarburg, 3237 (2), 3239 (2); Powers Lake, 10282 (4), Ralph Brucker; Racine, 3232. *Wisconsin:* no special locality, 15343, 15346-7 (5, 3), Mrs. Senn.

***P. pergibbosus* Hall and Whitfield.**

Illinois: Bridgeport, 2623 (5), 25344.

***Pentamerus* sp. ?**

Illinois: Bridgeport, 2611-2 (2), 2618-20; Joliet, 3225 (2), 3235 (3).

Genus *Conchidium* Hisinger 1799

Genotype *C. bilocularis* Linnaeus 1753

***C. multicostatum* (Hall).**

Illinois: Bridgeport, 15345.

***C. nettelrothi* Hall and Clarke.**

Illinois: Joliet, 3104. *England:* Dudley, 3402.

***C. occidentale* Hall.**

Illinois: Bridgeport, 2631 (2). *Canada:* Galt, 3398 (2).

Conchidium ? sp.
Indiana: Waldron, 3242.

Order Telotremata Beecher
Superfamily Rhynchonellacea Schuchert
Family RHYNCHONELLIDAE Gray
Subfamily Rhynchotreminae Schuchert
Genus *Rhynchotreta* Hall 1879
Genotype *Terebratula cuneata* Dalman

***R. cuneata americana* (Hall).**
Illinois: Cicero, 2580 (5), 5377. *Indiana:* Waldron, 3210 (8). *Wisconsin:* Racine, 3211 (6).

Genus *Uncinulus* Bayle 1878
Genotype *Terebratula subwilsoni* D' Orbigny

***U. strictlandi* (Sowerby).**
Illinois: Bridgeport, 2584-5 (5, 7), 2587 (7). *Indiana:* Waldron, 3203 (6).

***U. tennesseensis* (Roemer).**
Tennessee: West Tennessee, 3215 (2).

Uncinulus sp.
Illinois: Bridgeport, 2645.

Subfamily Rhynchonellinae Gill
Genus *Camarotoechia* Hall and Clarke 1893
Genotype *Atrypa congregata* Conrad

***C. (?) acinus* (Hall).**
Indiana: Waldron, 3212 (9).

***C. (?) indianensis* (Hall).**
Indiana: Waldron, 3221 (14).

***C. neglecta* (Hall).**
Indiana: Waldron, 3223 (2).

***C. whitei* (Hall).**
Indiana: Waldron, 3221 (23).

Genus *Wilsonia* Kayser 1871

Genotype *Terebratula wilsoni* Sowerby 1818

***W. saffordi* (Hall).**

Tennessee: Wayne Co., 3213 (2), 3218 (5).

***W. wilsoni* (Sowerby).**

Tennessee: West Tennessee, 3217 (2).

Superfamily Spiriferacea Waagen

Family ATRYPIDAE Gill

Subfamily Zygospirinae Waagen

Genus *Atrypina* Hall and Clarke 1893

Genotype *Leptocoelia imbricata* Hall

***A. disparilis* (Hall).**

Indiana: Waldron, 3237 (6).

Subfamily Atrypinae Waagen

Genus *Atrypa* Dalman 1828

Genotype *Anomia reticularis* Linnaeus 1767

***A. marginalia* (Dalman).**

Illinois: Bridgeport, 2614 (8), 17314.

***A. nodostriata* Hall.**

Illinois: Bridgeport, 2619 (8).

***A. praemarginalis* Savage.**

Illinois: Rock Run, 2354.

***A. reticularis* (Linnaeus).**

Illinois: Bridgeport, 2589-91 (2, 15, 1), 2595-8 (2, 8, 2, 1), 2602-4 (2, 1, 1), 5391 (3), 5626. *Indiana:* Waldron, 3206 (5). *New York:* Genesee Gorge, 17213 (3), F. C. Baker. *Wisconsin:* Racine, 3209 (3).

Family SPIRIFERIDAE King

Subfamily Spiriferinae Zittel

Genus *Eospirifer* Schuchert 1913

Genotype *Spirifer radiatus* Sowerby 1825

***E. eudora* (Hall).**

Wisconsin: Racine, 3192 (2).

***E. gibbosus* (Hall).**

Illinois: Bridgeport, 2582, 17315.

***E. niagarensis* (Conrad).**

Wisconsin: Wauwatosa, 3187 (6), 3194 (2).

***E. nobilis* (Barrande).**

Wisconsin: Racine, 3191 (6).

***E. radiatus* (Sowerby).**

Illinois: Bridgeport, 2576-8 (10, 3, 3), 2592 (2), 5359 (4), J. F. Porter, 5360-2 (3, 4, 3); Joliet, 3193, 3198 (4). *Indiana:* Waldron, 3190 (3), 15337. *Wisconsin:* Racine, 3240-1 (2); Wauwatosa, 3195.

***E. (?) similior* (Winchell and Marcy).**

Illinois: Bridgeport, 2615 (8), 2624 (10).

Genus *Crispella* Kozlowski 1929

Genotype *Spirifer crispus* Hisinger

***C. crispa* (Hisinger).**

Illinois: Bridgeport, 2581 (11), 5363 (3). *Indiana:* Waldron, 3196 (6), 3197 (4).

Genus *Delthyris* Dalman 1828

Genotype *D. elevata* Dalman

***D. elevatus* Dalman.**

England: Dudley, 3400 (2).

***D. ohioensis* (Grabau).**

New York: Litchfield, 3424.

Genus *Cyrtia* Dalman 1829

Genotype *Anomites exporrectus* Wahlenberg 1821

***C. meta* (Hall).**

Illinois: Bridgeport, 17316.

Family RHYNCHOSPIRIDAE Hall and Clarke

Genus *Homoeospira* Hall and Clarke 1893

Genotype *Rhynchospira evax* Hall 1863

***H. evax* (Hall).**

Indiana: Waldron, 3205 (10).

Genus *Trematospira* Hall 1857

Genotype *Spirifer multistriatus* Hall

***Trematospira* sp.**

Illinois: Bridgeport, 3245.

Family MERISTELLIDAE Hall and Clarke

Subfamily Hindellinae Schuchert

Genus *Whitfeldella* Hall and Clarke 1893

Genotype *Atrypa nitida* Hall 1843

***W. Iaevis* (Vanuxem)?**

New York: Litchfield, 3423.

***W. nitida* (Hall).**

Illinois: Bridgeport, 3587-8 (4, 12), 2600 (many), 2601. *Indiana:* Waldron, 3200 (12), 15342.

Genus *Nucleospira* Hall 1859

Genotype *Spirifer ventricosa* Hall 1857

***N. pisiformis* Hall.**

Illinois: Hawthorne, 2641-2 (1,4). *Indiana:* Waldron, 3238 (5).

Subfamily Meristellinae Waagen

Genus *Meristina* Hall 1867

Genotype *Meristella maria* Hall 1863

***M. maria* (Hall).**

Illinois: Bridgeport, 2586 (5), 2599, 2605 (5). *Indiana:* Waldron, 3201-2 (5, 6).

***Meristina* sp.**

Illinois: Bridgeport, 2362.

Genus *Meristella* Hall 1860

Genotype *Atrypa laevis* Vanuxem

***Meristella* sp. ?**

Illinois: Bridgeport, 2593, 2610.

Family COELOSPIRIDAE Hall and Clarke

Genus *Coelospira* Hall 1863

Genotype *Leptocoelia concava* Hall 1857

***C. hemispherica* (Sowerby).**

New York: Genesee Gorge, 17214-5 (9+, 6+), donor unknown.

PHYLUM MOLLUSCA

Class Pelecypoda Goldfuss

Order Prionodesmacea Dall

Section A. Paleochonca pp. Neumayr

Family GRAMMYSIIDAE Fischer

Genus *Edmondia* Koninck 1847

Genotype *Isocardia unioniformis* Phillips

***E. (?) nilesi* Winchell and Marcy.**

Illinois: Bridgeport, 2700 (5), 17330 (2).

Section B. Taxodonta Neumayr (emend.)

Family LEDIDAE Adams

Genus *Cleidophorus* Hall 1847

Genotype *Nuculites planulata* Conrad 1841

***C. chicagoensis* (Miller).**

Illinois: Bridgeport, 2697 (2, probably cotypes), 2693 (2, topotypes), 2698.

Superfamily Arcacea Deshayes

Family CYRTODONTIDAE Ulrich

Genus *Whitella* Ulrich 1890

Genotype *W. obliquata* Ulrich 1890

***W. quadrangularis* (Whitfield).**

Illinois: Bridgeport, 5379.

Genus *Matheria* Billings 1858

Genotype *M. tenara* Billings 1858

***M. recta* (Hall).**

Illinois: Bridgeport, 2701 (6), 2704 (5), 5373 (7), 17334 (2).

Genus *Megalomus* Hall 1852

Genotype *M. canadensis* Hall 1852

***M. canadensis* Hall.**

Canada: Galt, 3397. *Illinois:* Lemont, 9296 (2), Deda Versama.

Section C. Schizodonta Steinmann (emend.)

Superfamily Pteriacea Dall

Family PTERDINEIDAE Dall

Genus *Pterinea* Goldfuss 1826

Genotope *P.* l*aevis* Goldfuss

***P. brisa* Hall.**

Illinois: Bridgeport, 2665 (5), 2669 (3), 5370 (4), 17331. *Indiana:* Waldron, 3265.

***P. rolans* Winchell and Marcy ?**

Illinois: Bridgeport, 2664, 2668, 2670 (3), 2671-2 (2, 3), 17332.

***Perinea?* sp.**

Illinois: Joliet, 3386.

Family AMBONYCHIIDAE Miller

Genus *Amphicoelia* Hall 1868

Genotype *A. leidyi* Hall 1868

***A. neglecta* (McChesney).**

Illinois: Bridgeport, 2681-3 (1, 1, 3), 2686-8, 2694, 2695-6, 5376, 5381 (8), 17336; Riverside, 5382 (3), J. F. Porter. *Wisconsin:* Wauwatosa, 3254.

Genus *Mytilarca* Hall 1869

Genotype *Inoceramus chemungensis* Conrad

***M. acutirostra* (Hall).**

Illinois: Bridgeport, 2676-9 (5, 9, 2, 6), 2685, 5367 (6), 17333 (2).

Genus *Streptomytilus* Kindle and Berger 1904

Genotype *S. wabashensis* Kindle and Berger 1904

***S. alphaea* (Hall).**

Illinois: Cicero, 2680.

Family CONOCARDIIDAE Neumayr

Genus *Conocardium* Bronn 1834

Genotype *C. hibernicum* Koninck 1851

***C. niagarense* Winchell and Marcy.**

Illinois: Bridgeport, 2703 (8).

Conocardium ? sp.

Illinois: Joliet, 3257.

Section E. Dysodonta Neumayr (emend.)
Superfamily Mytilacea Ferussac
Family MODIOLOPSIDAE Fischer (emend.)

Genus *Modiolopsis* Hall 1847

Genotype *Cypricardites ovatus* Conrad

***M. dictaeus* Hall.**

Illinois: Bridgeport, 2707 (8), 5374 (3), 17335 (3).

Order Teleodesmacea Dall
Section B. Diogenodonta
Superfamily Cypricardiacea Dall
Family PLEUROPHORIDAE Dall

Genus *Cypricardinia* Hall 1859

Genotype *C. lamellosa* Hall 1859

***C. arata* Hall.**

Illinois: Bridgeport, 2960-1 (12, 1), 5378, 17328 (4).

Class Gastropoda [6]
Subclass Eugastropoda
Superorder Prosobranchia
Order Archeogastropoda

Genus *Tremanotus* Hall 1875

Genotype *T. alpheus* Hall 1868

***T. alpheus* Hall.**

Locality ? 2747-8 (2, 1), 2750-2 (1, 2), 2574-8 (2, 3, 1, 1, 1), 2760-2, 5394-5 (1, 3), donor unknown. Additional specimens, not cataloged.

[6] The genera of the Gastropoda are arranged in the order in Shimer and Shrock (1944).

***T. chicagoensis* (McChesney).**

Wisconsin: Cedarburg, 3280.

Genus *Bellerophon* Montford 1808

Genotype *B. vasulites* Montford 1808

***Bellerophon ?* sp.**

Illinois: Rock River, 2341.

Genus *Raphistoma* Hall 1847

Genotype *Maclurea striatus* Emmons 1842

***R. rotuloides* (Hall).**

New York: Genesee Gorge, 17207, F. C. Baker.

Genus *Lophospira* Whitfield 1886

Genotype *Murchisonia bicincta* Hall 1847

=*M. milleri* Miller 1897

L. casii* (Meek and Worthen) var. *internudia ?

Illinois: Bridgeport, 2709.

Genus *Phanerotrema* Fischer 1885

Genotype *Pleurotomaria labrosa* Hall 1868

***P. occidens* (Hall).**

Illinois: Bridgeport, 2715, 2717-9 (6, 6, 2), 2721, 2726, 2740, 2753; Channohon, 360.

Genus *Trochonema* Salter 1859

Genotype *Pleurotomaria umbilicata* Hall 1847

***T. fatuum* (Hall).**

Illinois: Bridgeport, 2724-5.

***T. pauper* (Hall).**

Illinois: Bridgeport, 2715 (2).

Genus *Gyronema* Ulrich and Scofield 1897

Genotype *G. pulchellum* Ulrich and Scofield 1897

***G.* ? *cyclonemoides* (Meek and Worthen).**

Illinois: Bridgeport, 2342, 2714-5 (3, 1).

Genus *Hormotoma* Salter 1859

Genotype *Murchisonia gracilis* Hall

***H. subulata* (Conrad).**

Illinois: Bridgeport, 2830 (2), 5392 (3).

***Hormotoma* sp.**

Illinois: Bridgeport, 2829.

Genus *Murchisonia* D'Archiac and Verneuil 1841

Genotype *Muricites turbinatus* Schlotheim 1841

***Murchisonia ?* sp.**

Illinois: Bridgeport, 2743 (2); Rock Run, 2331. *Wisconsin:* Wauwatosa, 3276.

Genus *Loxonema* Phillips 1841

Genotype *Terebra (?) sinuosa* Sowerby

***L. boydi* Hall.**

Illinois: Bridgeport, 2834-5 (6, 5), 17342 (3).

***Loxonema ?* sp.**

Illinois: Rock Run, 2329 (6), 2355 (2).

Genus *Euomphalus* J. Sowerby 1814

Genotype *E. pentangularis* Sowerby 1814

E. funatus ?

England: Dudley, 3401.

Genus *Straparolus* Montford 1810

Genotype *S. dionysii* Montford 1810

***S. mopsus* Hall.**

Illinois: Bridgeport, 17334. *Wisconsin:* Waukesha, 2731 (3), W. W. Calhoun.

Straparolus sp.

Illinois: Bridgeport, 2730 (3).

Genus *Euomphalopterus* Roemer 1876

Genotype *Turbinites alatus* Wahlenberg

***E. halei* (Hall).**

Illinois: Cicero, 2837.

Genus *Holopea* Hall 1847

Genotype *H. symmetrica* Hall 1847

***H. chicagoensis* (Winchell and Marcy).**

Illinois: Chicago (3).

***H. niagarensis* Winchell and Marcy.**

Illinois: Bridgeport, 2825-6 (7, 1).

***Holopea ?* sp.**

Illinois: Bridgeport, 2827 (2), Rock Run, 2334.

Genus *Platyceras* Conrad 1840

Genotype *Pileopsis vetusta* Sowerby

***P. niagarense* (Hall).**

Illinois: Bridgeport, 2728, 2734A (2); Joliet, 3290 (2). *Indiana:* Waldron, 3279 (2), 3274.

***Platyceras* sp. ?**

Illinois: Joliet, 3309, 3269 (2), 3272

Genus *Diaphorostoma*[7] Fischer 1885

Genotype *Platyostoma ventricosum* Conrad

***D. niagarense* (Hall).**

Illinois: Bridgeport, 2735-6 (5, 12), 2729A-B (2), 2735, 3273 (2); Channahon, 362.

Genus *Strophostylus* Hall 1859

Genotype *S. andrewsi* Hall

***S. cyclostomus* Hall.**

Indiana: Waldron, 3270 (8).

***S. cancellatus* Hall.**

New York: Genesee Gorge, 17238 (10), F. C. Baker.

[7] J. Brookes Knight, and other authorities, recently have included *Diaphorostoma* with the genus *Platyceras*, with several subgenera. They point out that "*Diaphorostoma niagarense*" is the same species as "*Platyceras niagarense*" and that it may be listed as *Platyceras (Platyostoma) cornutum* (Kindle and Breger). Shimer and Shrock (1944, p. 473).

Order Neogastropoda Knight

Genus *Subulites* Emmons 1842

Genotype *S. elongatus* Emmons

***S. gracilis* Miller.**

Illinois: Bridgeport, 2716A (2).

***Subulites* sp.**

Illinois: Bridgeport, 2836A (6).

Genus *Pycnotrochus*[8] Perner 1903

Genotype *P. victor* Perner 1903

***P. ? gonopleura* (Winchell and Marcy).**

Illinois: Bridgeport, 2841 (3).

Genus *Onychochilus*[8] Lindström 1884

Genotype O. *physa* Lindström 1884

***O. ? sigaretoides* (Winchell and Marcy).**

Illinois: Bridgeport, 2833.

N. B. Under the uncertain generic designation of *"Pleurotomaria" ? idia* Hall the Academy has 3 specimens from Bridgeport, 2712 (2), and 5386.

Class Cephalopods Cuvier

Subclass *Nautiloidea* Zittel (Tetrabranchiata Owen 1832)

Order Orthochoanites Hyatt

Family ORTHOCERATIDAE M'Coy

Genus *Geisonocerina* Foerste 1935

Genotype *Orthoceras wauwatosense* Whitfield 1880

***G. wauwatosense* (Whitfield).**

Wisconsin: Wauwatosa, 3283, 3286-7 (2, 1).

[8] The genera *Pychnotrochus* and *Onychochilus* have been recommended by J. Brooks Knight to include *"Pleurotomaria gonopleura"* and *"P. sigaretoides"* respectively.

Family CYCLOCERATIDAE Hyatt

Genus *Dawsonoceras* Hyatt 1884 (emend. Foerste 1924)

Genotype *D. hyatti* Foerste 1928

***D. annulatum* (Sowerby).**

Illinois: Bridgeport, 2816 (2), 2818, 2846-8 (2?, 1, 3); Chicago, 2821, 12307, Albert Donaldson. *Indiana:* Osgood, 3296, 3302, 3288. *New York:* Rochester, 17421 (2), W. C. Crane; 3301, Arthur Peabody. *Wisconsin:* Wauwatosa. 2494, 3281, 3284.

***Dawsonoceras* sp.**

Illinois: Blue Island, 2796; Bridgeport, 2793, 2812, 2814, 2820, 2822, 2844-5 (1, 5), 4873; Cicero, 2823 (3); Joliet, 3299 (2), 12107.

Genus *Protokionoceras* Grabau and Shimer 1910

Genotype *Orthoceras medullare* Hall 1868

***P. medullare* (Hall).**

Wisconsin: Wauwatosa, 3285, 3293 (topotypes ?).

Genus *Kionoceras* Hyatt 1884

Genotype *Orthoceras doricum* Barrande

***K. cancellatum* (Hall).**

Illinois: Bridgeport, 2189, 2315, 2790, 2794-5, 2797 (2), 2800-2, 2803-4, 2806, 2808-10 (1, 1, 9) 2855-6; Joliet, 3131, 3147. *Wisconsin:* 3295; Racine, 3311.

K. striatus ?

Illinois: Bridgeport, 2791, 2798.

Family LITUITIDAE Noetling

Genus *"Lituites"* Montfort 1808

Genotype *"L." lituus* Montfort 1808

***"Lituites"* sp.**

Illinois: Joliet, 3321, 3325-7 (2, 1, 1).

Genus *Lechitrochoceras* Foerste 1930

Genotype *Trochoceras desplainense* McChesney 1860

***L. desplainense* (McChesney).**

Illinois: Bridgeport, 2913, 2915-6.

***Lechitrochoceras* sp.**

Wisconsin: 3712.

Genus *Gyroceras* Dekoninck 1842

Genotype *G. paridoxicum* Dekoninck 1842

***G. bannisteri* Winchell and Marcy.**

Illinois: Bridgeport, 2906 (2) , 2911-2 (3, 5) , 2917-9 (1, 1, 2).

Genus *"Nautilus"* Owen

Genotype *"N." pompilius* Linnaeus 1758

N. (?) capax (Hall).

Illinois: Joliet, 3320.

Order Cyrtochoanites Hyatt

Family ACTINOCERATIDAE Saemann

Genus *Actinoceras* Bronn 1837

Genotype *A. bigsbyi* Bronn

***A. abnorme* (Hall).**

Wisconsin: Racine, 3291, 3294-5.

***A. vertebratum* (Hall).**

New York: Genesee Gorge, 17239, F. C. Baker.

II Actinosyphonata Hyatt

Family RIZOCERATIDAE Hyatt

Genus *Cyrtorizoceras* Hyatt 1900

Genotype *Cyrtoceras minneapolis* Clarke 1897

***C. fosteri* (Hall).**

Illinois: Bridgeport, 2881 (3), 2882, 2883, 2885 (2), 2886; 2887, 2900 (2), both E. W. Nelson; 2899, 2901-2, 5384-5 (4, 1), 17347.

Family OOCERATIDAE Hyatt

Genus *Cyrtoceras* Goldfuss 1832

Genotype *C. depresses Goldfuss*

***C. rigidum* Hall.**

Illinois: Bridgeport, 2884, 2888-9, 2893-6 (3, 2, 2, 1), 2898, 17346. *Wisconsin:* Racine, 576.

Family ONCOCERATIDAE Hyatt

Genus *Oncoceras* Hall 1847

Genotype *O. constrictum* Hall

***O. orcas* (Hall).**

Illinois: Joliet, 3316, 3318-9. *Wisconsin:* Racine, 3310.

Family TRIMEROCERATIDAE Hyatt

Genus *Septameroceras* Hyatt 1883

Genotype *Gomphoceras inflatum* Billings

***S. septore* (Hall).**

Wisconsin: Wauwatosa, 3305 (2).

Family PHRAGMOCERATIDAE Hyatt

Genus *Protophragmoceras* Hyatt 1900

Genotype *Cyrtoceras murchisoni* Barrande

***P. hercules* (Winchell and Marcy).**

Illinois: Bridgeport, 2873, 2875, 2891-2. *Wisconsin:* Waukesha, 3324.

Genus *Gomphoceras* Sowerby 1839

Genotype *Orthoceras pyriforme* Sowerby

***G. scrinium* Hall.**

Illinois: Bridgeport, 2857-8 (4, 2), 2860-2 (6, 5, 1), 2881 (3), 17345 (2) ?; Kankakee, 3303.

***Gomphoceras* sp.**

Illinois: Joliet, 3304. *Wisconsin:* Wauwatosa, (2).

Genus *Phragmoceras* Broderip 1839

Genotype *P. arcuatum* Sowerby

***P. nestor* Hall.**

Illinois: Bridgeport, 2877-9. *Wisconsin:* Wauwatosa, 3308, 3312, 3315.

PHYLUM ARTHROPODA

Class Crustacea

Subclass Trilobita

Order Opisthoparia Beecher

Family ILLAENIDAE Corda

Genus *Illaenus* Dalman 1826

Genotype *Entromostracites crassicauda* Wahlenberg

Illaenus sp.

Illinois: Bridgeport, 2943 (7), 2945, 2967; Joliet, 3349 (2).

Genus *Bumastus* Murchison 1839

Genotype *B. barriensis* Murchison

***B. armatus* (Hall).**

Illinois: Bridgeport, 2929-31 (1, 21, 6), 2933-5 (3, 5, 5), 5397 (3 plus), 2946, 5396 (7), 5398-9 (6, 4), 5400.

***B. cuniculus* (Hall).**

Wisconsin: Wauwatosa, 3359-60 (1, 2), 3368 (2 ?).

***B. graftonensis* (Winchell and Marcy).**

Illinois: Joliet, 3361-2 (2, 4); Joliet, (3), A. H. Hawk.

***B. ioxus* (Hall).**

Illinois: Cicero, 2941; Bridgeport, 2944 (2 ?); Joliet, 3355-6 (5,2)?. *Indiana:* Jefferson Co., 15304, F. T. Cockerton.

Family GOLDIIDAE Raymond

Genus *Scutellum* Pusch 1833

=*Goldius* Dekoninck 1841

Genotype *S. costatum* Pusch

***S. acamas* (Hall).**

Wisconsin: Racine, 3390; Wauwatosa, (1).

***Scutellum* sp.**

Illinois: Channahon, 3434.

Family LICHADIDAE Corda

Genus *Lichas* Dalman 1827

Genotype *Entomostracites laciniatus* Wahlenberg

***Lichas* sp.**

Illinois: Brideport, 2869 (2).

Genus *Dicranopeltis* Hawle and Corda 1847

Genotype *Lichas scabra* Beyrich

***D. decipiens* (Winchell and Marcy).**

Illinois: Bridgeport, 2961, 2963 (4).

***Dicranopeltis* sp.**

Illinois: Bridgeport, 17351.

Genus *Metopolichas* Gurich 1901

Genotype *M. hubneri* Eichwald

***M. pugnax* (Winchell and Marcy).**

Illinois: Bridgeport, 17352 (2).

Genus *Arctinurus* Castelnau 1843

=*Playnotus* Conrad 1838

Genotype *Paradoxides boltoni* Bigsby 1825

***A. boltoni* (Bigsby).**

New York: Trenton FaIls, 1019, plaster cast.

Genus *Trochurus* Beyrich 1845

Genotype *T. speciosis* Beyrich

***T. phlyctainoides* (Green).**

Illinois: Joliet, 330-333, 3344.

Family ODONTOPLEURIDAE Burmeister

Genus *Ceratocephala* Warder 1838

Genotype *C. goniata* Warder

***C. goniata* Warder.**

Illinois: Bridgeport, 2957 (4), 2968, 2970-1 (3, 3), 17349.

Order Proparia Beecher

Family CALYMENIDAE Milne-Edwards

Genus *Calymene* Brongniart 1822

Genotype *C. blumenbachi* Brongniart

***C. celebra* Raymond.** (Known extensively as *C. niagarensis* Hall.)

Illinois: Bridgeport, 2920-3 (3, 7, 1, 1), 2949 (7), 17329 ? (2); Chicago, 9432, John Berwick; 12306 (2) Albert Donaldson; Drainage Canal, Sec. 6, 9886 (10), Herman Goldbach; 12012-3, C. F. Gunther; Grafton, 3339 (2), 15803, W. W. Calkins; 7986, Mrs. Davidson; Joliet, 3355 (3), E. W. Nelson; 3336-7 (1, 3), 3347, 5430 (7), 5432; Monroe County, 3334, Henry Rendeberg; Warsaw, 3330. *Indiana:* Waldron, 3332 (3). *Wisconsin:* Racine, 3367 ? (1) ?

***C. (?) chicagoensis* S. A. Miller.**

Illinois: Bridgeport, 2699.

Genus *Synhomalonotus* Pompeckj 1898

Genotype *Calymene tristani* Brongniart

***S.* (?) *christyi* (Hall).**

Indiana: Waldron, 3373.

Family CHEIRURIDAE Salter

Subfamily Cheirurinae Raymond

Genus *Cheirurus* Beyrich 1845

Genotype *C. exsul* Beyrich

***C. niagarensis* (Hall).**

Illinois: Bridgeport, 2498 (6), 2951, 2953, 2972, 5401. *Wisconsin:* Wauwatosa, 15806.

Genus *Ceraurus* Green 1832

Genotype *C. pleuroexanthemus* Green

***C. (?) chicagoensis* S. A. Miller.**

Illinois: Bridgeport, 2699.

***Ceraurus ?* sp.**

Illinois: Bridgeport, 2690 (2).

Genus *Sphaerexochus* Beyrich 1845

Genotype *S. mirus* Beyrich

***S. romingeri* Hall.**

Illinois: Joliet, 2974, 3341 (5), 3364-5 (3, 3) *Wisconsin:* Wauwatosa, 3375 (3), 3389.

Subfamily Deiphonenae Raymond

Genus *Deiphon* Barrande 1850

Genotype *D. forbesi* Barrande

***D. forbesi* Barrande.**

Illinois: Joliet, 3387.

Superfamily Phacopidacea Delo 1935

Family DALMANITIDAE Delo 1935

Subfamily Dalmanitinae Reed 1905

Genus *Dalmanites* Barrande 1852

Genotype *Trilobus caudatus* Brunnich

***D. illinoisensis* Weller.**

Illinois: Joliet, 3379.

***D. limulurus* (Green).**

New York: Lockport, 3374.

***D. platycaudatus* Weller.**

Illinois: Joliet, 3377 (8).

***D. verrucosus* (Hall).**

Indiana: Waldron, 2394, 3370-1 (2, 1), 3376 (2), 3378, 15805; Shelby County, 3384.

***D. vigilans* Hall.**

Illinois: Joliet, 3385 (2). *Indiana:* Osgood, 3362 ?.

Dalmanites ? sp.

Illinois: Joliet, 3345 (4), 3391.

Class Eucrustace Kingsley
Subclass Ostracoda Latreille
Superfamily Leperditacea Bassler and Kellett 1934
Family LEPERDITIIDAE Jones
Genus *Leperditia* Rouault 1851
Genotype *L. brittanica* Rouault

L. faba Hall ?
Indiana: Waldron, 3329 (6).

***Leperditia* sp.**
Illinois: Channahon, 613? (2).

Subclass Cirripedia Burmeister
Order Theracia Darwin
Family TURRILEPADIDAE Clarke
Genus *Turrilepas* Woodward 1865
Genotype *Chiton wrightianus* Dekoninck
= *T. wrightii* Dekoninck

***T. wrightianus* (Dekoninck).**
England: Dudley, 3405.

Class Arachnida
Subclass Merostomata Dana (emend. Woodward) 1866
Order Eurypterida Burmeister
Family EURYPTERIDAE Burmeister
Genus *Eurypterus* DeKay 1825
Genotype *E. remipes* DeKay

***E. remipes* DeKay.**
New York: Buffalo, 3439; Litchfield, 16216, F. T. Cockerton.

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ERRATA

p. 4, line 5, read Thomas *A.* Greene.
6, read which *his heirs* later presented.
p. 8, line 5, read *Greene Memorial Museum.*
23, read R. *S.* Bassler.
25, read J. Marvin Weller, *University of Chicago.*
30, read *Greene Memorial Museum.*
p. 11, fourth line from bottom, read "Hist., 1868, P. 369, ... "
p. 13, end of first paragraph under Catalog, read Shimer and Shrock's Index Fossils of N. A.
p. 26, line 1, for "Lauden" read Laudon.
p. 29, for "***O. flabellites*** (Foerste)" read ***D. flabellites.***
p. 32, line 2, read Subfamily Gypidulinae.
p. 33, for ***"U. strictlandi"*** read ***U. stricklandi.***
p. 38, line 7, read Pterineidae.
for ***"Perinea ?* sp."** read ***Pterinea ?* sp.***
p. 43, footnote, read *Pycnotrochus.*

N. B., For the above errors, mostly typographical, the senior author assumes responsibility.